# Letters to the editor

## RESPONSE TO CLOZAPINE IN PSYCHOSIS ASSOCIATED WITH VELO-CARDIO-FACIAL SYNDROME

#### **DEAR EDITOR:**

We report a case of new onset psychosis in a patient with velocardio-facial syndrome (VCFS) responsive only to clozapine but with adverse effects. This case highlights the increased sensitivity to clozapine in VCFS.

Case report. A 25-year-old woman with VCFS was admitted to the psychiatric unit after a one-week history of paranoid delusions, bizarre behavior, and auditory hallucinations. She believed coworkers were plotting against her, that they wanted to kill her, and that police agencies were looking for her. She had noncommanding auditory hallucinations of her boyfriend's footsteps. She had no history of alcohol or substance abuse and no significant family psychiatric history. She had borderline mental retardation, narrow palpebral fissures, and mild orbital hypertelorism. The results of urine toxicology were negative, and a complete blood count, routine chemistry, transaminases, RPR, B12 level, folate level, and thyroidstimulating hormone were all normal. A brain computed tomography (CT) scan showed developmental prominence of the lateral ventricles. Lower thoracic levoscolisosis and lumbar rotatory dextroscolisosis were seen on X-rays. During the hospitalization, trials of olanzapine, aripiprazole, ziprasidone, and perphenazine produced no improvement. The delusions and hallucinations persisted, and there were episodes of loud, angry outbursts. Clozapine was started at 25mg (daily dosage) and titrated by 25mg every one or two days. Within

two weeks, despite mild sedation and hypersalivation, her mental status improved. She became less suspicious, denied hallucinations, and the outbursts abated. At 150mg clozapine, she had a grand-mal seizure. Within 30 minutes following the seizure, her prolactin level was measured and found to be 81.7ng/mL (normal 13-19ng/mL) and was found to be 13.3ng/mL the next day. Her electroencephalogram (EEG) showed no seizure activity. Clozapine was discontinued. Since she had responded to clozapine, a rechallenge commenced, beginning at 12.5mg and titrated up by 12.5mg every three days to 75mg. Divalproex sodium was added. After two weeks, the clozapine level was 172ng/mL and valproic acid level was 88.1mcg/mL. She showed no delusions, hallucinations, or outbursts. She was interactive, read books, played piano, and enjoyed drawing. She was discharged home with her family on clozapine 75mg and divalproex sodium 750mg.

**Discussion.** VCFS is a common genetic disorder estimated to affect 1 in 4000 births. 1 It is generally associated with deletion of chromosome 22q11.2 The syndrome is characterized by distinctive dysmorphology, congenital heart disease, and learning disabilities.3 After adolescence, a high prevalence of psychiatric illness is reported, including schizophrenia and bipolar disorders. 4 Psychosis in patients with VCFS is resistant to antipsychotic medications,3 but partial response from risperidone and clozapine is reported.<sup>2,4</sup> One prior case reported clozapine improved psychotic symptoms but with adverse effects, including hypersalivation, constipation, and seizures.<sup>5</sup> Our case confirms usefulness and reinforces caution in the use of clozapine in

VCFS. Low dosage and slow titration of clozapine with divalproex resolved the psychosis in our patient without side effects. This case may assist management of psychosis in VCFS.

#### REFERENCES

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With regards,

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